

Title (en)
EXCAVATING IMPLEMENT HEADING CONTROL

Title (de)
KURSSTEUERUNG FÜR AUSHUBVORRICHTUNG

Title (fr)
COMMANDE DE CAP D'OUTIL D'EXCAVATION

Publication
EP 3491196 B1 20211110 (EN)

Application
EP 17835051 A 20170724

Priority
• US 201615221188 A 20160727
• US 2017043495 W 20170724

Abstract (en)
[origin: US2018030693A1] An excavator includes a chassis, an implement, control architecture, and an assembly to swing with, or relative to, the chassis and including a boom, stick to curl relative to the boom, and coupling between the implement and stick. The implement rotates about an axis R such that a leading edge LE defines a heading \hat{l} . The control architecture comprises sensors, actuators, and controllers to utilize sensor signals to generate a LE position relative to a reference based on reference data and map information, utilize sensor implement edge signals and the excavator position relative to the reference and map information to generate a nearest implement edge (NIE) signal indicative of a LE NIE position relative to the reference, and utilize the actuators for divertive implement rotation about R to adjust \hat{l} to account for divertive rotation away from an actual or projected overlap of the NIE and reference.

IPC 8 full level
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CPC (source: EP US)
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